Filter Data Sheet

General Grade Nylon - Nylon Membrane for Liquid Applications

General Grade Nylon Cartridges are designed for general purpose use wherever a cost effective pleated membrane filter is required. Designed to hold the maximum amount of filter media that can be completely and effectively utilised in a cartridge, general grade filters lower the cost of filtration. Priced below special purpose cartridges, general grade cartridges are still manufactured with the same careful attention to both quality and performance.

Flow Rate

The following table represents typical water flow at 69 mbar (one psi) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housing with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	l/min
0.1 µm	3,8
0.2 µm	5,7
0.45 µm	15,1
0.65 µm	22,7

Construction Materials

Filtration Media ..... Nylon 6,6
Support Media ..... Polypropylene
End Caps ..... Polypropylene
Center Core ..... Polypropylene
Outer Support Cage ..... Polypropylene
O-rings/Gaskets ..... Silicone, EPDM, Buna, Viton, Teflon® Encapsulated Viton, Polyfoam

Sanitisation/Sterilisation

Filtered Hot Water ..... 90°C
Autoclave ..... 127°C, 30 min, multiple cycles
In-line Steam ..... 135°C, 30 min, multiple cycles
Chemical Sanitisation - Industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Dimensions

Length:
10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:
2.70 inches (7.0 cm) nominal
Filter Area: 0,7 m^2 per 10”

Maximum Recommended Operating Conditions

Temperature ..... 80°C

Maximum Differential Pressures

Forward ..... 3,4 bar at 20°C
Reverse ..... 2,7 bar at 20°C

Product Purity

All components FDA acceptable per 21 CFR. All polypropylene components meet the specifications for biological safety per USP Class VI-121 C for plastics.

Ordering Information (universal ordering code, not all options are available)

NPG	Pore Size	Length	End Cap Code	O-Rings/Gaskets
	0,1 = 0,1 µm	1 = 10” (25.4 cm)	1 = DOE with Gaskets	1 = Silicone
	0,2 = 0,2 µm	2 = 20” (50.8 cm)	2 = SOE -222 O-rings with Flat Cap	2 = EPDM
	0,45 = 0,45 µm	3 = 30” (76.2 cm)	3 = SOE -222 O-rings with Fin	3 = Buna
	0,65 = 0,65 µm	4 = 40” (101.6 cm)	4 = SOE -222 O-rings with Spring	4 = Viton
			5 = SOE -226 O-rings with Spring	5 = Teflon® Encapsulated Viton
			6 = SOE -226 O-rings with Flat Cap	6 = Polyfoam End Gaskets
			7 = SOE -226 O-rings with Fin	
			8 = SOE with Spring	
			9 = SOE with Core Extender	

Filter Data Sheet

Food & Beverage Grade Nylon - Nylon Membrane for F&B Applications

Food & Beverage Grade Cartridges are designed to meet the special needs of the Food & Beverage industry. Able to remove particles below the rated pore size of the membrane, these cartridges exhibit superior retention. Nylon cartridges are often used in Food & Beverage applications. Each cartridge module is rinsed with a high purity flush system. Each cartridge module is also individually tested for integrity using the diffusional flow method. Our design criteria and special procedures allow us to provide the highest quality Food & Beverage grade cartridge.

Flow Rate

The following table represents typical water flow at 69 mbar (one psi) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housing with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	l/min
0.1 µm	3,8
0.2 µm	5,7
0.45 µm	15,1
0.65 µm	22,7

Construction Materials

Filtration Media ..... Nylon 6,6
Support Media ..... Polypropylene
End Caps ..... Polypropylene
Center Core ..... Polypropylene
Outer Support Cage ..... Polypropylene
O-rings/Gaskets ..... Silicone, EPDM, Buna, Viton, Teflon® Encapsulated Viton, Polyfoam

Sanitisation/Sterilisation

Filtered Hot Water ..... 90°C
Autoclave ..... 127°C, 30 min, multiple cycles
In-line Steam ..... 135°C, 30 min, multiple cycles
Chemical Sanitisation - Industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Dimensions

Length:
10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:
2.70 inches (7.0 cm) nominal
Filter Area: 0,7 m^2 per 10”

Maximum Recommended Operating Conditions

Temperature ..... 80°C

Maximum Differential Pressures

Forward ..... 3,4 bar at 20°C
Reverse ..... 2,7 bar at 20°C

Product Purity

All components FDA acceptable per 21 CFR. All polypropylene components meet the specifications for biological safety per USP Class VI-121 C for plastics.

Ordering Information (universal ordering code, not all options are available)

NPF	Pore Size	Length	End Cap Code	O-Rings/Gaskets
	0,1 = 0,1 µm	1 = 10” (25.4 cm)	1 = DOE with Gaskets	1 = Silicone
	0,2 = 0,2 µm	2 = 20” (50.8 cm)	2 = SOE -222 O-rings with Flat Cap	2 = EPDM
	0,45 = 0,45 µm	3 = 30” (76.2 cm)	3 = SOE -222 O-rings with Fin	3 = Buna
	0,65 = 0,65 µm	4 = 40” (101.6 cm)	4 = SOE -222 O-rings with Spring	4 = Viton
			5 = SOE -226 O-rings with Spring	5 = Teflon® Encapsulated Viton
			6 = SOE -226 O-rings with Flat Cap	6 = Polyfoam End Gaskets
			7 = SOE -226 O-rings with Fin	
			8 = SOE with Spring	
			9 = SOE with Core Extender	

Filter Data Sheet

Electronics Grade Nylon - Nylon Membrane for Electronics Applications

Electronics Grade Cartridges are designed to meet the special needs of the electronics and high purity chemical industries. Able to remove particles below the rated pore size of the membrane, these cartridges exhibit superior retention. Nylon cartridges are often used for DI water, photoresist, developers and other compatible chemicals. Each cartridge module is pulse power flushed until the rinse effluent reaches 18 megohm•cm, and less than 3ppb TOC. Each cartridge module is also individually tested for integrity. Our design criteria and special procedures allow us to provide the highest quality electronic grade cartridge.

Flow Rate

The following table represents typical water flow at 69 mbar (one psi) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housing with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	l/min
0.1 µm	3,8
0.2 µm	5,7
0.45 µm	15,1
0.65 µm	22,7

Construction Materials

Filtration Media ..... Nylon 6,6
Support Media ..... Polypropylene
End Caps ..... Polypropylene
Center Core ..... Polypropylene
Outer Support Cage ..... Polypropylene
O-rings/Gaskets ..... Silicone, EPDM, Buna, Viton, Teflon® Encapsulated Viton, Polyfoam

Sanitisation/Sterilisation

Filtered Hot Water ..... 90°C
Autoclave ..... 127°C, 30 min, multiple cycles
In-line Steam ..... 135°C, 30 min, multiple cycles
Chemical Sanitisation - Industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Dimensions

Length:
10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:
2.70 inches (7.0 cm) nominal
Filter Area: 0,7 m^2 per 10”

Maximum Recommended Operating Conditions

Temperature ..... 80°C

Maximum Differential Pressures

Forward ..... 3,4 bar at 20°C
Reverse ..... 2,7 bar at 20°C

Product Purity

All components FDA acceptable per 21 CFR. All polypropylene components meet the specifications for biological safety per USP Class VI-121 C for plastics.

Ordering Information (universal ordering code, not all options are available)

NPE	Pore Size	Length	End Cap Code	O-Rings/Gaskets
	0,1 = 0,1 µm	1 = 10” (25.4 cm)	1 = DOE with Gaskets	1 = Silicone
	0,2 = 0,2 µm	2 = 20” (50.8 cm)	2 = SOE -222 O-rings with Flat Cap	2 = EPDM
	0,45 = 0,45 µm	3 = 30” (76.2 cm)	3 = SOE -222 O-rings with Fin	3 = Buna
	0,65 = 0,65 µm	4 = 40” (101.6 cm)	4 = SOE -222 O-rings with Spring	4 = Viton
			5 = SOE -226 O-rings with Spring	5 = Teflon® Encapsulated Viton
			6 = SOE -226 O-rings with Flat Cap	6 = Polyfoam End Gaskets
			7 = SOE -226 O-rings with Fin	
			8 = SOE with Spring	
			9 = SOE with Core Extender	